

IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A handheld user interface for an ultrasonic imaging system, the user interface comprising:

a set of display and user interaction areas ~~including~~ comprising:

an image area configured to display ultrasonic images;

a control area ~~including~~ comprising elements configured to enable a user to access a plurality of operation modes, ~~said the~~ the elements having active behavior that provides timely user control of the ultrasonic imaging system whereby each of the display areas can interact with the user independently in order to provide timely response to specific user requests; and

means for automatically optimizing system settings in accordance with a plurality of parameters.

2. (original) The user interface of claim 1, wherein the image area is further configured to display patient information fields.

3. (original) The user interface of claim 1, wherein the image area is further configured to display patient information retrieved from a patient information database using active database components.

4. (original) The user interface of claim 1, wherein the image area is further configured to display system configuration information using active display elements.

5. (currently amended) The user interface of claim 1, wherein the active behavior of the elements comprises behavior ~~[[is]]~~ based on context.

6. (currently amended) The user interface of claim 1, wherein the active behavior of the elements comprises behavior ~~[[is]]~~ based on a history of user interactions with the ultrasonic imaging system.
7. (currently amended) The user interface of claim 1, wherein the active behavior of the elements comprises behavior ~~[[is]]~~ based on a state of the ultrasonic imaging system.
8. (currently amended) The user interface of claim 1, wherein the elements are configured to accept input comprising ~~in the form of~~ voice commands.
9. (original) The user interface of claim 1, further comprising a virtual keyboard configured to allow the user to interact with the elements.
10. (currently amended) The user interface of claim 9, wherein the virtual keyboard comprises ~~includes~~ user programmable function keys.
11. (currently amended) The user interface of claim 9, wherein the virtual keyboard is configured to accept input comprising ~~in the form of~~ voice commands.
12. (original) The user interface of claim 9, wherein the virtual keyboard is configured to accept input via a touchscreen.
13. (currently amended) The user interface of claim 1, wherein the plurality of operation modes ~~includes~~ comprises a patient information mode, an image mode selection mode, an image acquisition mode, and a system configuration mode.
14. (currently amended) The user interface of claim 1, wherein the plurality of operation modes ~~includes~~ an archive mode ~~that is~~ configured to enable patient information to be saved to a patient information database.

15. (currently amended) The user interface of claim 1, wherein the plurality of operation modes ~~includes~~ comprises an annotation mode configured to enable the user to attach annotations to a stored ultrasonic image.

16. (original) The user interface of claim 15, wherein the annotation mode enables the user to attach a text annotation to the stored ultrasonic image.

17. (original) The user interface of claim 15, wherein the annotation mode enables the user to attach a voice annotation to the stored ultrasonic image.

18. (original) The user interface of claim 1, wherein the ultrasonic imaging system is portable.

19. (currently amended) The user interface of claim 1, wherein the control area comprises ~~includes~~ at least one tab selectable by the user to select one of the plurality of operation modes.

20. (currently amended) The user interface of claim 1, wherein the control area comprises ~~includes~~ a tab selectable by the user to expand the image area to a full screen view.

21. (currently amended) A handheld user interface for an ultrasonic imaging system, the user interface comprising:

a set of display and user interaction areas ~~including~~ comprising:

an image area configured to display ultrasonic images;

a control area ~~including~~ comprising elements configured to enable a user to access a plurality of operation modes, ~~said the~~ the elements having intelligent behavior that provides optimized user control of the ultrasonic imaging system whereby each of the display areas can interact with the user independently in order to provide timely response to specific user requests; and
means for automatically optimizing system settings in accordance with a plurality of parameters.

22. (original) The user interface of claim 21, wherein the image area is further configured to display patient information fields.

23. (original) The user interface of claim 21, wherein the image area is further configured to display patient information retrieved from a patient information database.

24. (original) The user interface of claim 21, wherein the image area is further configured to display system configuration information.

25. (currently amended) The user interface of claim 21, wherein the intelligent behavior of the elements comprises ~~includes~~ auto-adaptive behavior.

26. (currently amended) The user interface of claim 21, wherein the intelligent behavior of the elements comprise behavior ~~[[is]]~~ based on context.

27. (currently amended) The user interface of claim 21, wherein the intelligent behavior of the elements comprises behavior ~~[[is]]~~ based on a history of user interactions with the ultrasonic imaging system.

28. (currently amended) The user interface of claim 21, wherein the intelligent behavior of the elements comprises behavior ~~[[is]]~~ based on a state of the ultrasonic imaging system.

29. (currently amended) The user interface of claim 21, wherein the elements are configured to accept input comprising ~~in the form of~~ voice commands.

30. (original) The user interface of claim 21, further comprising a virtual keyboard configured to allow the user to interact with the elements.

31. (currently amended) The user interface of claim 30, wherein the virtual keyboard ~~includes~~ comprises user programmable function keys.

32. (currently amended) The user interface of claim 30, wherein the virtual keyboard is configured to accept input comprising ~~in the form of~~ voice commands.

33. (original) The user interface of claim 30, wherein the virtual keyboard is configured to accept input via a touchscreen.

34. (currently amended) The user interface of claim 21, wherein the plurality of operation modes ~~includes~~ comprises a patient information mode, an image mode selection mode, an image acquisition mode, and a system configuration mode.

35. (currently amended) The user interface of claim 21, wherein the plurality of operation modes ~~includes~~ comprises an archive mode ~~that is~~ configured to enable patient information to be saved to a patient information database.
36. (currently amended) The user interface of claim 21, wherein the plurality of operation modes ~~includes~~ comprises an annotation mode configured to enable the user to attach annotations to a stored ultrasonic image.
37. (original) The user interface of claim 36, wherein the annotation mode enables the user to attach a text annotation to the stored ultrasonic image.
38. (original) The user interface of claim 36, wherein the annotation mode enables the user to attach a voice annotation to the stored ultrasonic image.
39. (original) The user interface of claim 21, wherein the ultrasonic imaging system is portable.
40. (currently amended) The user interface of claim 21, wherein the control area ~~includes~~ comprises at least one tab selectable by the user to select one of the plurality of operation modes.
41. (currently amended) The user interface of claim 21, wherein the control area ~~includes~~ comprises a tab selectable by the user to expand the image area to a full screen view.

42. (currently amended) A handheld user interface for an ultrasonic imaging system, the user interface comprising:

a plurality of display areas, at least one of the plurality of display areas ~~including~~ comprising at least one independent element operable to receive user input and maintain a history of user interaction, the at least one independent element having behavior that depends upon input and the history of user interaction; and

means for automatically optimizing system settings in accordance with a plurality of parameters.

43. (original) The user interface of claim 42, wherein each of the plurality of display areas is resizable by a user.

44. (original) The user interface of claim 42, wherein each of the plurality of display areas is repositionable by a user.

45. (original) The user interface of claim 42, wherein at least one of the plurality of display areas is configured to display ultrasonic image data.

46. (original) The user interface of claim 42, wherein at least one of the plurality of display areas is configured to display system information.

47. (currently amended) A handheld user interface comprising:

a plurality of operation modes ~~including~~ comprising an image acquisition mode, a system configuration mode, a measure and annotate mode, an archiving mode, and a system services mode; [[and]]

a display view shown on a display device, the display view ~~including~~ comprising an image area and a control area, the image area configured to display an image generated in accordance with the image acquisition mode, and the control area configured to enable selection of one of the plurality of operation modes; and

means for automatically optimizing system settings in accordance with a plurality of parameters.

48. (currently amended) The user interface of claim 47, wherein the display view ~~includes~~ comprises a plurality of windows, each of the windows being resizable and repositionable within the display view.

49. (original) The user interface of claim 48, wherein the control area is configured to enable a user to hide all windows in the display view except for the image area, which then automatically expands to occupy the entire display view.

50. (currently amended) The user interface of claim 47, wherein the control area ~~includes~~ comprises at least one tab selectable by a user to select one of the plurality of operation modes.

51. (currently amended) The user interface of claim 50, wherein the control area ~~includes~~ comprises at least one tab selectable by the user to select at least one mode within a selected operation mode.

52. (currently amended) The user interface of claim 47, wherein the control area ~~includes~~ comprises a virtual keyboard.

53. (currently amended) A handheld user interface comprising:

an image view configured to display an ultrasound image; [[and]]

a control view configured to present controls to a user, the control view ~~including~~ comprising active elements, each active element having context-dependent behavior, and each active element configured to maintain a history of user interactions with that active element; the control view further ~~including~~ comprising intelligent elements, each intelligent element configured to provide auto-adaptive interactions between the user and the user interface; and

means for automatically optimizing system settings in accordance with a plurality of parameters.